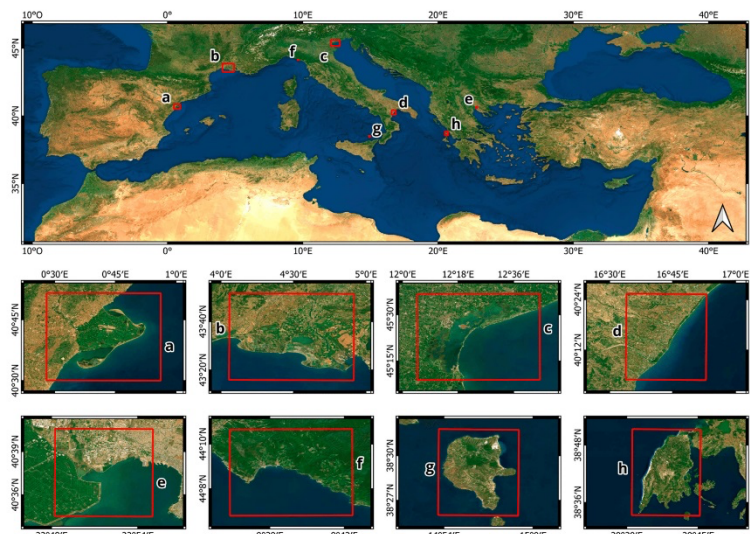


# Publication n.2

The SAVEMEDCOASTS-2 webGIS: The Online Platform for Relative Sea Level Rise and Storm Surge Scenarios up to 2100 for the Mediterranean Coasts.

## Summary

Here we show the SAVEMEDCOASTS-2 web-based geographic information system (webGIS) that supports land planners and decision makers in considering the ongoing impacts of Relative Sea Level Rise (RSLR) when formulating and prioritizing climate-resilient adaptive pathways for the Mediterranean coasts. The webGIS was developed within the framework of the SAVEMEDCOASTS and SAVEMEDCOASTS-2 projects, funded by the European Union, which respond to the need to protect people and assets from natural disasters along the Mediterranean coasts that are vulnerable to the combined effects of Sea Level Rise (SLR) and Vertical Land Movements (VLM). The geospatial data include available or new high-resolution Digital Terrain Models (DTM), bathymetric data, rates of VLM, and multi-temporal coastal flooding scenarios for 2030, 2050, and 2100 with respect to 2021, as a consequence of RSLR. The scenarios are derived from the 5th Assessment Report (AR5) provided by the Intergovernmental Panel on Climate Change (IPCC) and encompass different Representative Concentration Pathways (RCP2.6 and RCP8.5) for climate projections. The webGIS reports RSLR scenarios that incorporate the temporary contribution of both the highest astronomical tides (HAT) and storm surges (SS), which intensify risks to the coastal infrastructure, local community, and environment.



Figure

The SAVEMEDCOASTS-2 and SAVEMEDCOASTS case studies: **(a)** Ebro Delta (Spain); **(b)** Rhone Delta (France); **(c)** Venice Lagoon (Italy); **(d)** Metaponto Plain (Italy); **(e)** Chalastra Plain (Greece); **(f)** Cinque Terre (Italy); **(g)** Lipari Island (Italy); **(h)** Lefkada Island (Greece). Background layer: “Sentinel-2 cloudless—<https://s2maps.eu> (accessed on 7 August 2023) by EOX IT Services GmbH (Contains modified Copernicus Sentinel data 2020)”.

## How to cite:

Falciano, A.; Anzidei, M.; Greco, M.; Trivigno, M.L.; Vecchio, A.; Georgiadis, C.; Patias, P.; Crosetto, M.; Navarro, J.; Serpelloni, E.; et al. The SAVEMEDCOASTS-2 webGIS: The Online Platform for Relative Sea Level Rise and Storm Surge Scenarios up to 2100 for the Mediterranean Coasts. *J. Mar. Sci. Eng.* **2023**, *11*, 2071. <https://doi.org/10.3390/jmse11112071>